What is claimed is:

1. An improved method of detecting and counting articles of arbitrary size, shape, and orientation that travel along a passageway, comprising the steps of:

passing articles past at least a pair of orthogonally positioned light sources and respective orthoganally positioned light detectors that extend at a detection station;

operating the light sources alternately as the articles pass through the detection station;

obtaining a plurality of article scans by sensing the quantity of light that is detected by each light detector as each light source is operated and providing electrical signals representative of the amounts of light received by the respective light detectors;

storing the respective electrical signals and the times corresponding with each signal;

obtaining an actual volume of each article;

comparing the actual volume of each article to a predetermined volume for each article to obtain a count portion; and,

adding the count portions of each article to obtain a total batch volume.

2. The improved method of claim 1, wherein the step of obtaining an actual volume comprises:

calculating a cross sectional area for each article during each of the plurality of article scans; calculating a distance articles fall between each of the plurality of article scans; multiplying the cross sectional area by the distance to obtain a cross sectional volume; and, adding the cross sectional volumes of each article together.

3. The improved method of claim 1, further comprising the step of:

measuring the distance between articles entering the passageway using the light sources; and,

varying feed rate of articles to provide a desired distance.

4. The improved method of claim 2, further comprising the step of:

sending the cross sectional areas for an article to a data processor attached to a visualization screen;

processing the cross sectional areas to allow the cross sectional areas to be displayed on the visualization screen to visually depict the article.

5. The improved method of claim 1, further comprising the step of:

storing actual volume data to allow future calculation of article size or three-dimensional visualization of articles.

6. An improved method of detecting and counting articles of arbitrary size, shape, and orientation that travel along a passageway, comprising the steps of:

passing articles past greater than a pair of positioned light sources and respective positioned light detectors that extend at a detection station;

operating the light sources alternately as the articles pass through the detection station;

obtaining a plurality of article scans by sensing the quantity of light that is detected by each light detector as each light source is operated and providing electrical signals representative of the amounts of light received by the respective light detectors;

storing the respective electrical signals and the times corresponding with each signal;

obtaining an actual volume of each article;

comparing the actual volume of each article to a predetermined volume for each article to obtain a count portion; and,

adding the count portions of each article to obtain a total batch volume.